

## FERTILIZER RESEARCH AND EDUCATION PROGRAM

### 2006 REQUEST FOR PROJECT SUGGESTIONS

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The Fertilizer Research and Education Program (FREP) of the California Department of Food and Agriculture (CDFA) is accepting project suggestions to help provide growers and industry with cost-effective practices to improve the efficient use of fertilizer and minimize environmental impacts. Suggestions may focus on research, demonstration and/or education projects (see key research area goals listed below.) A funding limit of \$50,000 per year for up to three years is typical for projects, but larger projects will be considered. Multiple project suggestions will be accepted. All projects, however, must be relevant to California conditions.

### WHO MAY APPLY

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Any individual or group may submit a project suggestion.

### SELECTION AND NOTIFICATION PROCESS

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Proponents first submit a two-page project suggestion to FREP. The FREP Technical Advisory Subcommittee, which consists of growers, representatives of institutions of higher education, the fertilizer industry, CDFA, U.S. Department of Agriculture, and other governmental agencies, will review the suggestions to determine whether they are aligned with the program's key research area goals (outlined below). The committee will select project suggestions to include in the full Request for Proposals (RFP) based on project concept, impact, methodology, and feasibility. Then, the full RFP and submission guidelines will be released in the State Contracts Register, <http://www.cscr.dgs.ca.gov/cscr/>, and the FREP website, <http://www.cdfa.ca.gov/is/frep/>.

### TIMELINE

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Request for Project Suggestions released	February 2006
Project suggestions due	April 7, 2006
Request for Proposals released	May 2006
Proposals due	June 2006
Award notification	October 2006
Project start date	February 2007 or later

### KEY RESEARCH AREA GOALS

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FREP has identified research areas for special emphasis in 2006. These include:

- Nutrient uptake by tree crops
- Guidelines for orchard fertilization patterns
- Improved methodology for verifying effectiveness of foliar fertilizer

Additionally, FREP welcomes project suggestions for the following key research areas:

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## **1. Crop nutrient requirements**

Projects that determine or update nutrient requirements to improve crop yield or quality in an environmentally sound manner will be considered. Projects may include: research on crop nutrient uptake; the amounts, timing, and partitioning of nutrients removed from the soil; effects of soil chemistry on nutrient uptake; establishment or update of soil or tissue nutrient level thresholds used to determine fertilizer application timing and/or amounts; and the role of balanced nutrition in improving crop yield/quality.

## **2. Fertilization practices**

Projects that develop fertilization practices to improve crop production, fertilizer use efficiency or environmental impacts will be considered. Projects may include: research on slow-release fertilizers; foliar nutrient management; timing and effectiveness of fertilizer applications; new fertilizer technologies; and nutrient movement in differing soil types, cropping systems, and application methodologies.

## **3. Fertilizer and water interactions**

Projects that develop and extend information on fertigation methodologies leading to maximum distribution uniformity and minimizing fertilizer losses will be considered. Other approaches that will reduce ground and surface water contamination or improve the efficiency of fertilizing materials with respect to water management will also be considered.

## **4. Site-specific fertilizer technologies**

Projects that demonstrate and quantify applications for site-specific crop management technologies and best management practices related to precision agriculture will be considered. Projects may include: development of fertilizer yield response and utilization models based on spatial and temporal variability; and identification and quantification of interactions such as soil quality issues, soil type characteristics, soil fertility or irrigation variability, and economic relationships.

## **5. Diagnostic tools for improved fertility fertilizer recommendations**

Projects that develop field and laboratory tests for predicting crop nutrient response that can aid in making fertilizer recommendations will be considered. New techniques and diagnostic tools for monitoring soil and plant nutrient status are also encouraged. Field correlation studies may also be appropriate.

## **6. Nutrient/pest interactions and nutrient/growth regulator interactions**

Projects that demonstrate or provide practical information to growers and production consultants on nutrient/pest interactions will be considered. Pests may include insects, weeds or diseases.

## **7. Education and public information**

These projects may include the following:

- On-farm demonstrations of proven practices and technologies within FREP goals to encourage their adoption in California with priority areas given to impaired water bodies.
- Education and training of fertilizer management in areas with impaired water bodies.
- Programs to educate growers, fertilizer dealers, students, teachers, and the general public about the relationships between fertilizers, food, nutrition, and the environment.
- Preparation of publications, slide sets, videotapes, conferences, field days, and other outreach activities.

Suggested educational activities must explain how proposed activities will result in change, for example, by demonstrating to growers improved profitability, reduced risk or increased ease of management.

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## 8. Additional Areas

Other projects that support FREP's mission, such as air quality, tillage, crop rotation, economics of fertilizer use, and cropping systems will be considered.

## HOW TO APPLY

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Project suggestions may not exceed two pages. Please include the following information:

- Project title, project location, project duration, and project leader(s) information (name, title, affiliation, mailing address, telephone number, and e-mail address, if applicable).
- A simple and concise summary of the problem to be addressed.
- Description of the target audience.
- Objectives of the proposed project, and a description of the general approach to be used.

*(Note: At this time, budget specifics are not required.)*

**Project suggestions are due by 4:00 p.m., April 7, 2006.**

Incomplete, late, or project suggestions exceeding two pages will be returned and eliminated from consideration. While e-mailed project suggestions are preferred, mailed and faxed copies are acceptable. CDFA/FREP is not responsible for incomplete fax or e-mail transmissions.

## SEND PROJECT SUGGESTIONS TO:

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Fertilizer Research and Education Program  
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Information about current FREP-sponsored projects is available by contacting FREP staff to request proceedings from the 2005 CDFA/FREP conference. *(2003 and 2004 FREP conference proceedings are also still available.)*

This solicitation and other information about FREP are available on the FREP website at <http://www.cdfa.ca.gov/is/frep/>.

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